

ABSTRACT OF THE DISCLOSURE

From the data of diffusion-length-dependent parameters extracted from the parameters of the transistor model of MOS transistors and from the parameters of transistors having various diffusion lengths, a diffusion-length-dependent parameter correcting unit creates approximate expressions of the diffusion length dependence of these parameters, and calculates parameter correction values to be used instead of original parameter values by using the created approximate expressions. Hence, the correction values can be used easily instead of the original parameter values, whereby a transistor model of MOS transistors having a different diffusion length DL can be created easily. Circuit simulation in consideration of the diffusion length dependence of the drain currents of MOS transistors can thus be carried out, whereby highly accurate simulation can be attained.